

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-24. (Cancelled)

25. (Currently Amended) An information providing apparatus for supplying motion data, or an application program to a robot apparatus over a network, comprising:

a content storage unit ~~[[means]]~~ for storing at least one of data to be supplied to the robot apparatus and programs to be supplied to the robot apparatus;

~~receiving means~~ a first receiver for receiving an inquiry comprising a service request, prepared via interaction between the robot apparatus and a user, and information of the robot apparatus from the robot apparatus;

~~preparing means~~ a preparer for preparing a list of data or programs based on services requested in the service request and the information of the robot apparatus and for returning the list to the robot apparatus;

~~receiving means~~ a second receiver for receiving a selection of data or programs from the list from the robot apparatus, wherein the selected data or programs are needed by the robot apparatus for the robot apparatus to comply with a request of ~~[[a]]~~ the user; and

~~transmitting means~~ a transmitter for transmitting the selected data or programs to the robot apparatus.

26. (Previously Presented) The information providing apparatus according to claim 25, wherein the information providing apparatus communicates with the robot apparatus in accordance with a Simple Object Access Protocol.

27. (Currently Amended) The information providing apparatus according to claim 25, further comprising:

a database for supervising supplementary information pertinent to the data or programs stored in the content storage unit [[means]]; and

a matching unit [[means]] for matching the inquiry and the supplementary information.

28. (Currently Amended) The information providing apparatus according to claim 27, further comprising:

a returning unit [[means]] for returning, in response to the selection from the list, an access method for accessing the selected data or programs to the robot apparatus,

wherein the ~~transmitting means~~ transmitter transmits the selected data or programs, in response to an access request, corresponding to the accessing method, from the robot apparatus.

29. (Previously Presented) The information providing apparatus according to claim 27, wherein the supplementary information comprises information

pertinent to services and the information pertinent to information of the robot apparatus.

30. (Previously Presented) The information providing apparatus according to claim 25, wherein the information of the robot apparatus comprises at least one the following:

an ID of the robot apparatus, wherein the ID is unique to the robot apparatus;

a robot sort ID, wherein the sort ID is unique to a type of the robot apparatus;

a list of functions of the robot apparatus;

information indicating hardware architecture of the robot apparatus; and

a database list owned by the robot apparatus.

31. (Currently Amended) An information providing apparatus for providing data or a program to a robot apparatus, over a network, comprising:

a content storage unit ~~[[means]]~~ for storing at least one of data to be supplied to the robot apparatus and programs to be supplied to the robot apparatus;

a first receiver ~~receiving means~~ for receiving an inquiry comprising a service request, prepared via interaction between the robot apparatus and a user, and information pertinent to the robot apparatus from the robot apparatus,

wherein the information pertinent to the robot apparatus comprises a list of functions of the robot apparatus;

a preparer ~~preparing means~~ for preparing a list of data or programs based on services requested by ~~[[a]]~~ the user in the service request and the information of the robot apparatus and for returning the list to the robot apparatus;

a second receiver ~~receiving means~~ for receiving a selection of data or programs from the list from the robot apparatus, wherein the selected data or programs are needed by the robot apparatus for the robot apparatus to render the services requested;

a specifying unit ~~means~~ for specifying needed functions for the robot apparatus to render the services requested; and

a comparing unit ~~means~~ for comparing the needed functions to the list of functions to determine functions deficit in the robot apparatus, among the needed functions;

a retriever ~~means~~ for retrieving one or more objects of functional objects corresponding to the functions in deficit, from an object storage unit ~~[[means]]~~ for storing functional objects utilized by the robot apparatus; and

a transmitter ~~transmitting means~~ for transmitting the objects and the selected data or programs to the robot apparatus.

32. (Currently Amended) The information providing apparatus according to claim 25, wherein the information of the robot apparatus comprises a list of

functions of the robot apparatus, and wherein the information providing apparatus further comprises:

an object storage unit ~~[[means]]~~ for storage of functional objects utilized by the robot apparatus;

a specifying unit ~~[[means]]~~ for specifying needed functions for the robot apparatus to render the services requested;

a comparing unit ~~[[means]]~~ for comparing the needed functions to the list of functions to determine functions in deficit in the robot apparatus among the needed functions; and

a retriever ~~retrieving means~~ for retrieving one or more objects of functional objects corresponding to the functions in deficit, from the object storage unit ~~[[means]]~~, wherein the transmitter ~~transmitting means~~ transmits the objects, along with the selected data or programs, to the robot apparatus.

33. (Currently Amended) An information providing method for supplying motion data, stating the movements of a body unit of a robot apparatus, or an application program, managing recognition and/or action control, to a robot apparatus, over a network, the method comprising:

receiving, from the robot apparatus an inquiry comprising a service request, prepared via interaction between the robot apparatus and a user, and the information of the robot apparatus;

formulating a list of at least one of data that may be provided to the robot apparatus and programs that may be provided to the robot apparatus based on

services requested in the service request and the information of the robot apparatus;

returning the list to the robot apparatus;

receiving a selection of data or programs from the list from the robot apparatus, wherein the selected data or programs are needed by the robot apparatus for the robot apparatus to comply with a request of [[a]] the user; and transmitting the selected data or programs to the robot apparatus.

34. (Previously Presented) The information providing method according to claim 33, wherein communication with the robot apparatus is by Simple Object Access Protocol.

35. (Previously Presented) The information providing method according to claim 33, further comprising:

supervising supplementary information pertinent to each data or program;
and

matching the inquiry and the supplementary information,
wherein the formulating of the list of the data or programs is based on the matching of the inquiry and the supplementary information.

36. (Previously Presented) The information providing method according to claim 35, further comprising:

returning, in response to the selection from the list, an access method for accessing the selected data or programs to the robot apparatus,

wherein transmitting the selected data comprises transmitting the data or the program in response to an access request complying with the access method from the robot apparatus.

37. (Previously Presented) The information providing method according to claim 35, wherein the supplementary information comprises information pertinent to services and the information pertinent to information of the robot apparatus.

38. (Previously Presented) The information providing method according to claim 33, wherein the information of the robot apparatus comprises at least one the following:

an ID of the robot apparatus, wherein the ID is unique to the robot apparatus;

a robot sort ID, wherein the sort ID is unique to a type of the robot apparatus;

a list of functions of the robot apparatus;

information indicating hardware architecture of the robot apparatus; and

a database list owned by the robot apparatus.

39. (Currently Amended) An information providing method for providing data or a program to a robot apparatus, over a network, the method comprising:

receiving, from the robot apparatus, an inquiry comprising a service request, prepared via interaction between the robot apparatus and a user, and information of the robot apparatus, wherein the information of the robot apparatus comprises a list of functions of the robot apparatus;

formulating a list of at least one of data that may be provided to the robot apparatus and programs that may be provided to the robot apparatus based on services requested by [[a]] the user in the service request and the information of the robot apparatus;

returning the list to the robot apparatus;

receiving a selection of data or programs from the list from the robot apparatus, wherein the selected data or programs are needed by the robot apparatus for the robot apparatus to render the services requested;

specifying needed functions for the robot apparatus to render the services requested;

comparing the needed functions to the list of functions to determine functions in deficit in the robot apparatus, among the needed functions;

retrieving one or more objects of functional objects corresponding to the deficit functions, from an object storage [[means]] unit for storing functional objects utilized by the robot apparatus; and

transmitting the objects and the selected data or programs to the robot apparatus.

40. (Currently Amended) The information providing method according to claim 33, wherein the information of the robot apparatus comprises a list of functions of the robot apparatus, and the information providing method further comprising:

specifying needed functions for the robot apparatus to render the services requested;

comparing the needed functions to the list of functions to determine functions deficit in the robot apparatus, among the needed functions;

retrieving one or more objects of functional objects corresponding to the functions in deficit, from an object storage [[means]] unit for storing functional objects utilized by the robot apparatus; and

transmitting the objects, along with the selected data or programs, to the robot apparatus.

41. (Currently Amended) An information providing system comprising a robot apparatus and an information providing apparatus for supplying motion data, stating the movements of a body unit of the robot apparatus, or an application program, managing recognition and/or action control, to the robot apparatus over a network, wherein the information providing apparatus comprises:

a content storage unit [[means]] for storing data or programs to be supplied to the robot apparatus;

a first receiver ~~receiving means~~ for receiving an inquiry comprising a service request, prepared via interaction between the robot apparatus and a user, and information of the robot apparatus, from the robot apparatus;

a preparer ~~[[means]]~~ for preparing a list of data or programs based on services requested in the service request and the information of the robot apparatus and for returning the list to the robot apparatus;

a second receiver ~~[[means]]~~ for receiving a selection of data or programs from the list from the robot apparatus, wherein the selected data or programs are needed by the robot apparatus for the robot apparatus to comply with a request of ~~[[a]]~~ the user; and

a transmitter ~~transmitting means~~ for transmitting the selected data or programs to the robot apparatus.

42. (Previously Presented) The information providing system according to claim 41, wherein the information providing apparatus communicates with the robot apparatus in accordance with a Simple Object Access Protocol.

43. (Currently Amended) The information providing system according to claim 41, wherein the information providing apparatus further comprises:

a database for supervising supplementary information pertinent to the data or programs stored in the content storage ~~[[means]]~~ unit; and

a matching unit ~~[[means]]~~ for matching the inquiry and the supplementary information.

44. (Currently Amended) The information providing system according to claim 41, wherein the information providing apparatus further comprises:

a returning unit [[means]] for returning, in response to the selection from the list, an access method for accessing the selected data or programs to the robot apparatus;

wherein the ~~transmitting means~~ transmitter transmits the selected data or programs, in response to an access request, corresponding to the accessing method, from the robot apparatus.

45. (Previously Presented) The information providing system according to claim 43, wherein the supplementary information comprises information pertinent to services and information pertinent to information of the robot apparatus.

46. (Previously Presented) The information providing system according to claim 41, wherein the information of the robot apparatus comprises at least one the following:

an ID of the robot apparatus, wherein the ID is unique to the robot apparatus;

a robot sort ID, wherein the sort ID is unique to a type of the robot apparatus;

a list of functions of the robot apparatus;

information indicating hardware architecture of the robot apparatus; and

a database list owned by the robot apparatus.

47. (Currently Amended) The information providing system according to claim 41, wherein the information of the robot apparatus comprises a list of functions of the robot apparatus, and wherein the information providing apparatus further comprises:

a specifying unit ~~[[means]]~~ for specifying needed functions for the robot apparatus to render the services requested;

a comparing unit ~~[[means]]~~ for comparing the needed functions to the list of functions to determine functions deficit in the robot apparatus, among the needed functions; and

a retriever ~~[[means]]~~ for retrieving one or more objects of functional objects corresponding to the deficit functions, from an object storage unit ~~[[means]]~~ for storing functional objects utilized by the robot apparatus,

wherein the transmitter ~~transmitting means~~ transmits the objects and the selected data or programs to the robot apparatus.

48. (Currently Amended) The information providing system according to claim 41, wherein the information of the robot apparatus comprises a list of functions of the robot apparatus, and wherein the information providing apparatus further comprises:

an object storage unit ~~[[means]]~~ for storing functional objects utilized by the robot apparatus;

a specifying unit ~~[[means]]~~ for specifying needed functions for the robot apparatus to render services;

a comparing unit ~~[[means]]~~ for comparing the needed functions to the list of functions to determine functions deficit in the robot apparatus, among the needed functions; and

a retriever ~~retrieving means~~ for retrieving one or more objects of the functional objects corresponding to the functions in deficit, from the object storage unit ~~[[means]]~~;

wherein the ~~transmitting means~~ transmitter transmits the objects, along with the selected data or programs, to the robot apparatus.